

DESCRIPTIONS OF THREE NEW SPECIES OF MARINE
GASTROPODS FROM WEST MEXICO
AND GUATEMALA

By LEO GEORGE HERTLEIN and A. M. STRONG

Three species of marine gastropods from tropical west American localities, apparently not described, have been noticed in the collections of the California Academy of Sciences. It appears desirable to place these interesting forms on record, and accordingly they are here described as new and accompanied by illustrations.

LATIRUS SOCORRENSIS Hertlein & Strong, new species

Plate 26, Figure 8

Shell turreted, yellowish-white covered with an orange-brown periostracum; nucleus very small, eroded, forming a sharp point to the spire; normal whorls 8, regularly increasing in size, shoulder subangulate above which they are slightly concave and below which they are broadly rounded; axial sculpture consists of 9 rounded ribs, strong over the lower half of the whorls, faint over the slightly concave upper half, fading out on the base, in addition to the ribs there are strong lines of growth over the entire surface; spiral sculpture on the spire consists of 2 equal raised cords on the lower half of the whorls which are strong on top of the axial ribs but faint in the interspaces, on the last whorl these are followed by 4 equally strong and equally spaced similar cords with 3 more widely spaced cords on the canal, occasionally a fine spiral thread occurs between the major spiral cords on the canal; aperture narrow, showing broken lines of small ridges deep within, canal narrow, open, about equal in length to the aperture, the edge of the outer lip finely serrated by the ends of the spiral cords; a siphonal fasciole is present, columella with 3 sharp plaits at the lower end. Dimensions of the type: length, 39 mm.; maximum diameter, 17 mm.

Holotype, No. 5896, paratypes Nos. 5897, 5897a, 5897b (Calif. Acad. Sci. Dept. Paleo. Type Coll.), from Loc. 23776 (C.A.S.), Socorro Island, Revillagigedo Islands, Mexico; G. D. Hanna and E. K. Jordan collectors, 1925. Also paratype No. 5898, from Loc. 23777 (C.A.S.), Clarion Island.

This new species bears a slight resemblance to *Latirus ceratus* Wood¹ but it differs from that species in the more slender form,

¹*Murex ceratus* Wood, Index Test., Suppl., 1828, p. 15. As *Turbinella cerata* on p. 57, pl. 5, fig. 15. (No locality cited).—Kiener, Spéc. Gén. et Icon. Coq. Viv., Canalifères, Pt. 2, *Turbinella*, p. 25, 1841, pl. 16, fig. 1, 1840. "Habite la mer Pacifique, les côtes de Masatlan."—Reeve, Conch. Icon., Vol. 4, *Turbinella*, 1847, sp. 37, pl. 7, fig. 37. "Hab. Gallapagos Islands (under stones at low water); Cuming."—Tryon, Man. Conch., Vol. 3, 1881, p. 88, pl. 67, fig. 120 (as *Latirus ceratus*).

longer canal, less strongly tuberculate shoulder and in lacking the well developed fine, concentric, secondary spiral threads. It also differs from *Latirus concentricus* Reeve² in that the whorls are angulated at the shoulder and in that no spiral sculpture is present on the whorls posterior to the angulation. The species here described as new was recorded by Strong & Hanna³ as occurring at Clarion and Socorro Islands under the name of *Latirus concentricus*.

GENUS ASPELLA Mörch

Aspella Mörch, Malakozool. Blätter, Bd. 24, 1877, p. 24, Sole species *Ranella anceps* Lamarck.—Dall, Bull. Mus. Comp. Zool., Vol. 18, 1889, p. 206.—F. C. Baker, Bull. Chicago Acad. Sci., Vol. 2, No. 2, 1895 p. 178. "Type. Trophon anceps, Lam."—Wenz, Handbuch der Paläozool. (Lfrg. 7), Bd. 6, Gastropoda, Teil 5, 1941, p. 1109. "Monotypus: *A. anceps* (Lamarck) [*Ranella*]."

Type (by monotypy): *Ranella anceps* Lamarck, Hist. Nat. Anim. s. Vert., Vol. 7, August, 1822, p. 154. "Habite . . ."—Chenu, Man. de Conchyl. Vol. 1, 1859, p. 156, fig. 722.

Shell with high spire, somewhat flattened, whorls rounded; nearly continuous varices present on each side and between these 4-6 varices (often worn and extending somewhat beyond the posterior end of whorl); spiral sculpture consisting of threads or rows of fine nodes; aperture small, ovate, with a short, recurved, open anterior canal, outer lip with a varix, the interior margin lightly denticulate, columella bent, smooth, inner lip slightly projecting; operculum with an apical nucleus.

The genus *Aspella* occurs worldwide in tropical and subtropical marine waters. It has been recorded as occurring from Miocene to Recent in Europe and in the Caribbean region.

Hörnes⁴ cited a species under the name of *Ranella anceps* Lamarck from the Miocene of Austria and Boettger⁵ described "*Ranella (Argobuccinum) emmae*" from the Miocene of Hungary, a form which he compared to Lamarck's species.

Cossmann & Peyrot⁶ referred a species from the Burdigalian

²*Turbinella concentrica* Reeve, Conch. Icon., Vol. 4, *Turbinella*, July, 1847, sp. 2, pl. 1, fig. 2. "Hab. St. Elena, West Columbia (in sandy mud at the depth of seven fathoms); Cuming."—Tryon, Man. Conch., Vol. 3, 1881, p. 90 (in text), pl. 68, fig. 142 (as *Latirus concentricus*).

³Strong, A. M., and Hanna, G. D., Proc. Calif. Acad. Sci., Ser. 4, Vol. 19, No. 2, June 4, 1930, p. 11.

⁴*Ranella anceps* Lamarck, Hörnes, Abhandl. K. K. Geol. Reichsanst., Bd. 3, No. 3, 1856, p. 213, pl. 21, figs. 6a, 6b, 6c, 6d. "Steinabrunn." Austria, Miocene.

⁵See *Ranella (Argobuccinum) emmae* Boettger, Boettger, Verhandl. u. Mitt. Siebenbürg. Vereins f. Naturwiss. zu Hermannstadt, Bd. 54, Jahrg. 1904, 1906, Gastropoda, p. 40.

⁶*Eupleura subanceps* d'Orbigny, Cossmann & Peyrot, Act. Soc. Linn. de Bordeaux, Vol. 74, Conch. Neog. de L'Aquitaine, Vol. 4, Livr. 2, Gastropoda, 1924, p. 524, pl. 12, figs. 24, 25.

of France, described as *Ranella subanceps* d'Orbigny, to the genus *Eupleura*. They mentioned that the species from the Miocene of Poland cited as *Aspella anceps* by Friedberg⁷ may not be referable to *Eupleura*. Illustrations of the Polish species indicate that it is not referable to the one described by Lamarck.

Dall, 1889, placed *Powveria* Monterosato,⁸ 1884 (not *Powveria* Bonaparte, 1841), later renamed *Dermomurex* by Monterosato,⁹ in the synonymy of *Aspella*. Woodring¹⁰ however, regarded it as a separate genus. The type species *Powveria scalarina* Bivona (= *Murex scalarioides* Blainville) has been recorded from Miocene to Recent in the Mediterranean region and in the West Indies.¹¹

Two species of *Aspella*, *A. crosa* Broderip and *A. pyramidalis* Broderip, have been described from west American waters. The latter also has been recorded by the present authors as occurring in the Pleistocene of the Galapagos Islands. *Aspella pyramidalis* is similar to *A. anceps* Lamarck whereas *A. crosa* Broderip¹² is similar to the species described as *Murex alveatus* Kiener,¹³ 1843, generally believed to be an east American species, and other forms from that region cited by M. Smith¹⁴ under the names of *Aspella scalaroides pauperulus* C. B. Adams, 1850, and *A. scalaroides obeliscus* A. Adams, 1853.

Kiener's species is now generally referred to the genus *Aspella*. It was originally described without information as to the locality from which it came. According to Tryon and others it occurs in the Caribbean region.

⁷*Aspella anceps* Lamarck. Friedberg, Moll. Mioc. Poloniae (Lwów I Poznań). Gastropoda and Scaphopoda, Pars 2, 1912, p. 182, pl. 11, fig. 16a, b. "Miejscowść: Zborów (3 ok.)."

⁸*Powveria* Monterosato, Nom. Gen. e-Spec. Conch. Medit., 1884, p. 113. "Tipo: la specie seguente" (that is) "*P. scalarina*, Bivona (*Murex scalarinus*)." In the synonymy the following were included, "*M. scalaroides*, Bl. (non *Fusus scalaroides*, Lk., 1818-22)," "*Murex distinctus*, (De Crist. e Jan. 1832, foss.);" and "*M. leucoderma*, Sc."

⁹*Dermomurex* Monterosato, Natural. Sicil., Vol. 9, 1890, p. 181. A new name for *Powveria* Monterosato, 1884 (not *Powveria* Bonaparte, 1841).

¹⁰Woodring, W. P., Carnegie Inst. Washington, Publ. 385, 1928, p. 291.

¹¹*Aspella scalarioides* Blainville, Maury, Bull. Amer. Paleol., Vol. 5, No. 29, Pt. 1, April 7, 1917, p. 268 (104), pl. 43 (17), fig. 11. Miocene of Santo Domingo.

¹²*Murex crosa* Broderip, Proc. Zool. Soc. London for 1832, p. 174 (issued January 14, 1833). "Hab. ad Panamam." "Found under stones."—Sowerby, Conch. Illustr., *Murex*, Cat., p. 7, 1841, pl. 60, fig. 16, June 15, 1834.—Reeve, Conch. Icon., Vol. 3, *Murex*, 1845, sp. 160, pl. 32, fig. 160. Original locality cited.—Tryon, Man. Conch., Vol. 2, 1880, p. 129, pl. 38, figs. 460, 468.

¹³*Murex alveatus* Kiener, Spéc. Gén. Icon. Coq. Viv., Fam. Canalifères, Pt. 3, *Murex*, 1843, p. 94, pl. 46, fig. 2, "Habite."

¹⁴Smith, M., Illustr. Catal. Rec. Spec. Rock Shells (Trop. Labor.: Lantana, Florida), 1939, p. 18, pl. 14, figs. 2 and 3. For an illustration of the type of *Murex pauperulus* C. B. Adams see Clench, W. J., and Turner, R. D., Occ. Papers on Moll. Dept. Moll. Mus. Comp. Zool. Harvard Univ., Vol. 1, No. 15, June 26, 1950, p. 323, pl. 39, fig. 16. "Jamaica."

Another west American species, *Murex peasci* Tryon,¹⁵ possibly may be referable to *Aspella*. According to Pease who first described it under the name of *Murex foveolatus* (not *Murex foveolatus* Hinds, 1844), it resembles *Murex alveatus* Kiener more than any other species.

A species from an unknown locality, said to belong to the *Murex alveatus, peasci* group, was described by F. C. Baker¹⁶ under the name of "*Ocenebra rubra*."

ASPELLA BAKERI Hertlein & Strong, new species

Plate 26, Figures 1 and 2

Shell small, fusiform, rough; nucleus very small, white, of about 2 smooth, flattened whorls; normal whorls 5, pale brownish, darker on portions of the summit of the spiral cords and axial ribs; axial sculpture consists of 7 strong ribs extending from suture to suture and over the base to the canal; spiral sculpture consists of 2 major spiral cords on the lower portion of the whorls, riding over the axial ribs and slightly nodulous at the intersections, entire surface of spire and base with fine, raised spiral threads; canal short, nearly roofed over; aperture oval, small, outer lip flattened on the face, greatly thickened and expanded, at one half turn back from this the position of a previous lip is indicated by a decided thickening of the rib at that point, the two giving the shell the appearance of being laterally compressed, columella smooth, strongly curved. Dimensions of the type: length, 17.7 mm.; maximum diameter, 7.7 mm.

Holotype, No. 5893, paratype No. 5894 (Calif. Acad. Sci. Dept. Paleo. Type Coll.), from Loc. 24100 (C.A.S.), Agua Verde Bay, Lower California, Mexico, in the Gulf of California; Fred Baker coll.

The species here described as new is quite different in general appearance from the other species of *Aspella* occurring in west American waters. It slightly resembles *Aspella pyramidalis* Broderip¹⁷ but differs in the less flattened form, stronger radial plications between the varices and in the presence of two strong spiral ridges on the periphery of the whorls.

¹⁵*Murex peasci* Tryon, Man. Conch., Vol. 2, July 6, 1880, p. 129, pl. 38, fig. 462. "La Paz, L. California." A new name for *Murex foveolatus* Pease, Amer. Jour. Conch., Vol. 5, Pt. 2, October 7, 1869, p. 83, pl. 8, fig. 3. "Hab.—La Paz, in sinu Californico." Not *Murex foveolatus* Hinds, 1844.

¹⁶Baker, F. C., Proc. Rochester Acad. Sci., Vol. 1, Brochure 2, 1891, p. 134, pl. 11, figs. 6, 7. "Habitat unknown."

¹⁷*Ranella pyramidalis* Broderip, Proc. Zool. Soc. London for 1832, p. 194 (issued March 13, 1833). "Hab. ad Uliteam et Panamam." "Found on the reefs."—Sowerby, Conch. Illustr., *Ranella*, index to figs. (p. 7), ?1841, pl. 84, fig. 2, September 15, 1835. "Panama."—Reeve, Conch. Icon., Vol. 2, *Ranella*, 1844, sp. 43, pl. 8, fig. 43 (as *Ranella anceps*). "Hab. Panama (found on the reefs); Cuming."—Hertlein & Strong, Proc. Calif. Acad. Sci., Ser. 4, Vol. 23, No. 24, 1939, pp. 369, 379, pl. 32, figs. 10, 13 (as *Aspella pyramidalis*). James (San Salvador) Island, Galapagos Islands, Pleistocene.

MARGINELLA WOODBRIDGEI Hertlein & Strong, new species

Plate 26, Figures 3 and 4

Shell ovate, smooth, bright and shining; slate-colored with two poorly defined narrow darker bands dividing the shell into thirds; nucleus of a little more than 1 whorl, forming a small, pale orange-colored, flattened apex to the shell; normal whorls 2, sutures channeled, edged with white and bordered with a very fine orange-colored line; aperture narrow, nearly as long as the shell, outer lip thickened, blunt, white on the face with a fine orange line behind it; columella with 4 strong white plications, orange in the interspaces, interior of the aperture brown. Dimensions of the type: length, 12.3 mm.; maximum diameter, 7.2 mm.

Holotype, No. 7253, paratype No. 7254, from Loc. 29042 (C. A.S.), San José, Guatemala; Woodbridge Williams collector, April, 1937.

This new species appears to be the one reported from west American waters in older records under the name of *Marginella marginata* Born,¹⁸ a somewhat similar shell from the West Indies. The west American shell differs from the species described by Born in that the shell is more slender, less broadly rounded across the shoulder and the outer lip is narrower.

This new species greatly resembles the illustration given by Sowerby¹⁹ of a shell from Panama cited as "a dwarf variety" of *Marginella cœrulescens* Lamarck,²⁰ a species originally described from "sur les côtes de l'île de Gorée," Africa. Redfield and Tryon questionably referred Sowerby's figure 155 to *Marginella storeria* Couthouy²¹ which was originally described from the Gulf of Mexico. Tomlin²² later stated that the form illustrated by Sowerby's figure 155 is not referable to *M. cœrulescens* and mentioned Redfield's conclusion regarding it. Lamarck's species is now generally placed in the synonymy of *Marginella prunum* Gmelin, 1790, a species in which the spire is much higher than that of *M. marginata* or *M. storeria*. The species here described as new more closely resembles *Marginella storeria* Couthouy than any other species known to us but differs in possessing a narrower shell, more sloping shoulder of the body whorl and in the narrower outer lip. The orange-colored line behind the outer lip is a characteristic feature of *M. woodbridgei*, but in bleached shells the shape serves to separate it from other west American species.

¹⁸*Voluta marginata* Born, Index Cæs. Vindobon., 1778, p. 207.—Born, Test. Mus. Cæs. Vindobon., 1780, p. 220, pl. 9, figs. 5, 6. "Patria ignota."—Reeve, Conch. Icon., Vol. 15, *Marginella*, 1864, sp. 46, pl. 11, figs. 46a, 46b. "Hab. Senegal, West Africa."

¹⁹*Marginella cœrulescens* Lamarck, Sowerby, Thes. Conch., Vol. 1, 1846, p. 383, pl. 77, fig. 155. "From Panama. Fig. 155 represents a dwarf variety."

²⁰*Marginella cœrulescens* Lamarck, Hist. Nat. Anim. s. Vert., Vol. 7, August, 1822, p. 356. "Habite l'Océan atlantique, sur les côtes de l'île de Gorée."

²¹*Marginella storeria* Couthouy, Boston Jour. Nat. Hist., Vol. 1, No. 4, May, 1837, p. 440, pl. 9, figs. 1, 2. "Inhabits the southern coasts of the Gulf of Mexico."

²²Tomlin, J. R. le B., Proc. Malacol. Soc. London, Vol. 12, 1917, p. 256.